

## **T-28-1 – “Survey for Critically Imperiled (S1) Pond-breeding Amphibians in St. Tammany Parish, Louisiana”**

*Abstract:* Four pond-breeding amphibians are ranked by the Louisiana Natural Heritage Program as critically imperiled in Louisiana (S1): tiger salamander, four-toed frog, ornate chorus frog, and Mississippi gopher frog. St. Tammany Parish is the only parish where all four species have been documented. The objectives of this study were to: 1) sample 20 to 30 temporary ponds in St. Tammany Parish for larvae of the four target species; and 2) obtain data on habitat characteristics of the ponds and surroundings to evaluate habitat suitability for the target species. Larvae were sampled using a combination of drop boxes and dip nets in early April, 2005. Numerous water quality, vegetation, and physical parameters were characterized. No larvae for any of the four target species were observed at the 22 ponds sampled. Water quality appeared to be good to excellent, and therefore, not a likely cause for target species absence. Most ponds were surrounded by pine plantations with little or no herbaceous cover. These four species are quite rare in St. Tammany Parish and may never have been abundant. The primary reason for their rarity may be lack of suitable habitat and habitat alteration. Ornate chorus frog and Mississippi Gopher Frog prefer ponds in open-canopy habitats. Fire suppression and preference for loblolly pine over longleaf pine may have allowed a greater degree of canopy closure around ponds wherein these two frogs had occurred historically. Only two sampled ponds were surrounded by longleaf pine. Several ponds are recommended for future sampling.

(Abstracted by A. Ardoin {2007} from: “*Survey for Critically Imperiled (S1) Pond-breeding Amphibians in St. Tammany Parish, Louisiana*”; Final Report (June 2006); Pechmann, J.H.K., M. A. Sisson, and N. E. Leonard; University of New Orleans; New Orleans, LA; 23 pp., plus raw data records)

This grant was closed 30 June 2006. **For more information** about State Wildlife Grant T-28, or to obtain copies of interim or final reports, please contact the State Wildlife Grant Coordinator, LDWF Fur & Refuge Division.